

# Extinction

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Humans are one of about 1.75 million identified species. Many scientists believe that millions more species inhabit our world yet remain unidentified. Some species have become extinct after less than half a million years, while other species have existed almost unchanged for many millions of years. Contrary to popular belief, extinction is a natural process. Based on fossil record, the average rate of extinction has been one species out of every million per century. However, today experts predict that at least one of every four species may become extinct by 2050.

This worldwide endangerment of animals and plants is a phenomenon of the 20th century. It is a product of the continuing use of more and more natural resources for a constantly growing human population. Thus, many wildlife species become endangered because there is less wild space for them to inhabit.

Unfortunately, we are witnessing a great wave of extinctions. The current rate may be as high as several species per day. Among the species of most concern are those confined or endemic to a single island or group of islands. These "island" territories can also be cave systems, parks, and reserves that people have created.

When species are isolated, they are vulnerable to environmental changes and natural catastrophes. These are not the only causes of endangerment to species. Hunting and air, water, and land pollution are also responsible for reducing species numbers. So, directly or indirectly, species are becoming threatened because of increasing human population.

From the earliest times, hunters have caused the extinction of species. From the Stone Age up to the 18th century, mainly large animals were hunted to extinction. But with the invention of guns, hunters targeted smaller animals and birds. This accelerated the rate of extinction, especially of birds.

Today, in theory, hunting is regulated in most countries, however, it remains a major threat to the survival of many birds and animals. Commercial hunting for ivory, skins, and other products continues to cause the extinction of species. In the 21st century, scientists predict that plant species, such as rare orchids and cacti, will become endangered from hunting and collecting.

Over many years, hundreds of pesticides and other chemicals have run into rivers and accumulated in the soil. This threatens the animal species that feed on plants and other animals. Equally dangerous are the "ghost" nets—discarded or lost fishing nets—that drift in the oceans, trapping and killing fish, seabirds, seals, dolphins, and turtles. Furthermore, industrial gases trapped in the atmosphere pollute the air and cause global warming, changing the environments of species.

Habitat destruction threatens the greatest number of species. Because people need food and shelter, the environments of many species are being eliminated or reduced. In many places, people are turning forests into farmland. Since the early 1990's, some 12 million hectares of tropical forests have been cleared every year. At this rate within 40 years all remaining tropical forests will disappear. In a worse case scenario, it is estimated that by 2010, the area of tropical forests in Asia, West and East Africa, and Central and South America will be almost depleted.

To preserve our present environment and to bring back species on the verge of extinction requires more commitment and money. Fortunately, conservationists are using the Internet and television to educate and inform people about environmental issues.

Several arguments encourage people and countries to adopt conservation methods and pass laws to protect the environment. One point is that plants and animals enhance our world and our environments. Shady trees, colorful butterflies, and singing birds are only a few species that add to the quality of our environments. Second, plants and animals are useful to people. Many plants are medicinal, and some insects protect crops. A third argument is that our survival depends upon a healthy global ecosystem. Without clean air and water, people are more vulnerable to life-threatening diseases.

Whichever argument we use for conserving the environment, one fact is certain: the present rate of destruction cannot continue without the eventual collapse of ecosystems and human populations. Species are as threatened as we are by population growth, pollution, and conflicts over the limited resources.

### **Discussion questions:**

- What animals, plants, or fish are endangered in your country?
- What caused each one to become endangered?
- How can you or your community prevent species from becoming threatened?
- What other arguments would influence you to adopt conservation methods?